Clinical Ecology: Future Prospect of Preventative Medicine

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This article is not only for those who are already converted to alternative medicine but for all the rest who want to better understand the disease process and early prevention.

Introduction

The socio-economical, psychological and environmental complexity of civilization has had a definite impact on human health and disease, wealth and happiness. Rapid man-made changes in the natural environment as well as new diseases and symptoms are hardly understood by society, those who suffer, or the healers themselves. Everyone is familiar with the history of terrible epidemics sweeping entire populations of villages and towns in the Middle Ages as well as the problem of hunger and infectious disease which is still prevalent in some Third World countries. Today, in the majority of cases, dwellers of the industrialized world, along with its medical community, no longer have to worry about bacterial, parasitic, fungal or viral disease. Are we then free of medical problems? Do we have fewer hospitals? Are we spending less on medical care? Are we healthier? With the present day thinking of the medical profession and its entire staff as well as those responsible for setting policies for healthcare, can we even dare hope that we're better off now than we were forty years ago?

Basically the leading causes of death remain unchanged. (20) We are definitely living longer. This is mainly due to the decreased perinatal mortality rate and improved sanitary conditions. In spite of our wonderful technological achievements in medicine, our improved diagnostic methods, our excellent hospital facilities, we are still confronted with an increased number of people who are suffering from many diseases. We encounter more disabled people, those who are psychiatrically sick, more diabetes mellitus, more Parkinsonism, more gastrointestinal disorders and definitely more cancer. (6)

General Practitioner's Involvement

Among the medical profession, general practitioners probably see the most people with multi-symptomatic complaints. These may include the following: allergic reactions, headaches, sinus problems (recurrent colds), digestive problems (indigestion, constipation), muscular pains, ringing ears, recurrent earaches, chest pain, heart palpitation, numbness and paresthesia, emotional problems, chronic fatigue, anxiety, depression, inability to concentrate and think properly, excessive reactions to normally occurring stress. These people are less productive at work. Many top executive people, highly trained, are unable to think straight and use to the maximum their ability to manage, organize and execute their responsibilities. Many have greater difficulties coping with regular family activities at home. What are physicians able to offer these patients?

Tests are performed; sometimes, admission into hospital is necessary where more sophisticated tests such as specialized x-rays, brain scans, CAT scans are completed. Numerous and different drugs are prescribed. Unfortunately, more often than not, the patient feels no better and returns to the doctor with the same complaints along with a few new ones. These people are then referred to psychiatrists, where many hours are spent in talking. Again medication is prescribed. During all of this the patient's disease process remains

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uninterrupted; the complaints and suffering continue. Finally, the patient is often told to live with it and accept it as a part of life. Medically, the diagnosis is psychosomatic or idiopathic in nature.

Are we medical doctors missing something? Are we really helping people who are sick? Are we able to find the cause of these complaints? We do more by-pass surgery and liver, lung and joint transplants. We create more and more new drugs, using them to treat symptoms. Are we solving the majority of medical as well as social and economic problems using this approach? We still fail to understand the cause of the process and symptoms we're dealing with.

What Is Preventative Medicine?

One may ask, does preventative medicine exist today other than immunizations for children? Does any recognized medical specialty provide and promote preventative medicine? Positively speaking, preventative medicine exists even though it is not ! generally recognized and accepted by mainstream medical authorities.

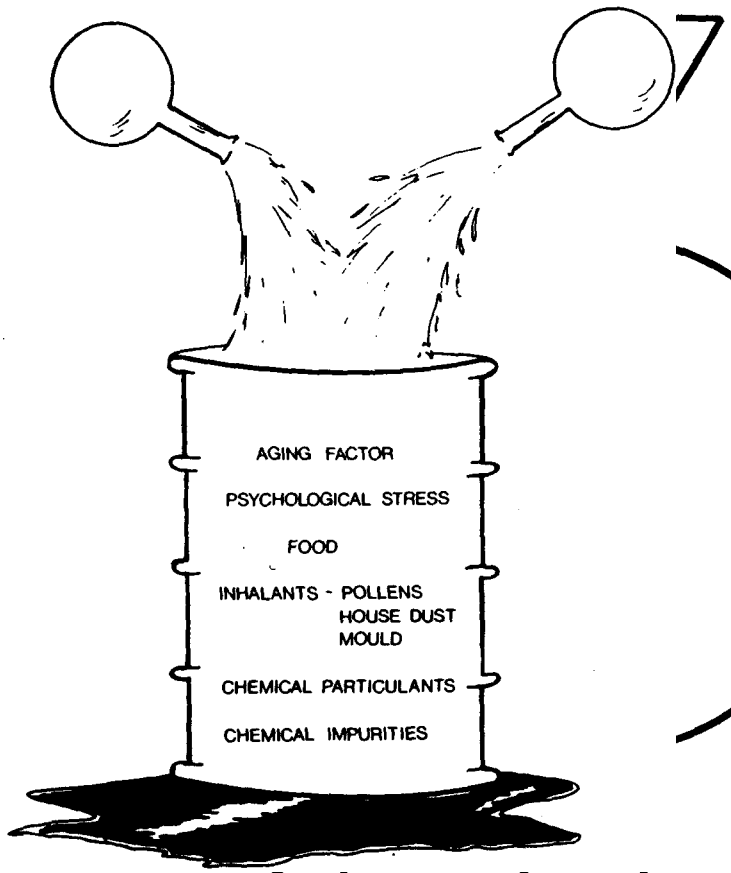
The definition of preventative medicine is a recognition of the present causes of disease in a particular society and the organization of strategies to remove the cause and prevent its reoccurrence by constantly monitoring any environmental changes which may alter our ecosystem. Preventative medicine in its true existence is a new rising field of medicine, the most holistically oriented, known as Clinical Ecology. (3)

Environmental Impact

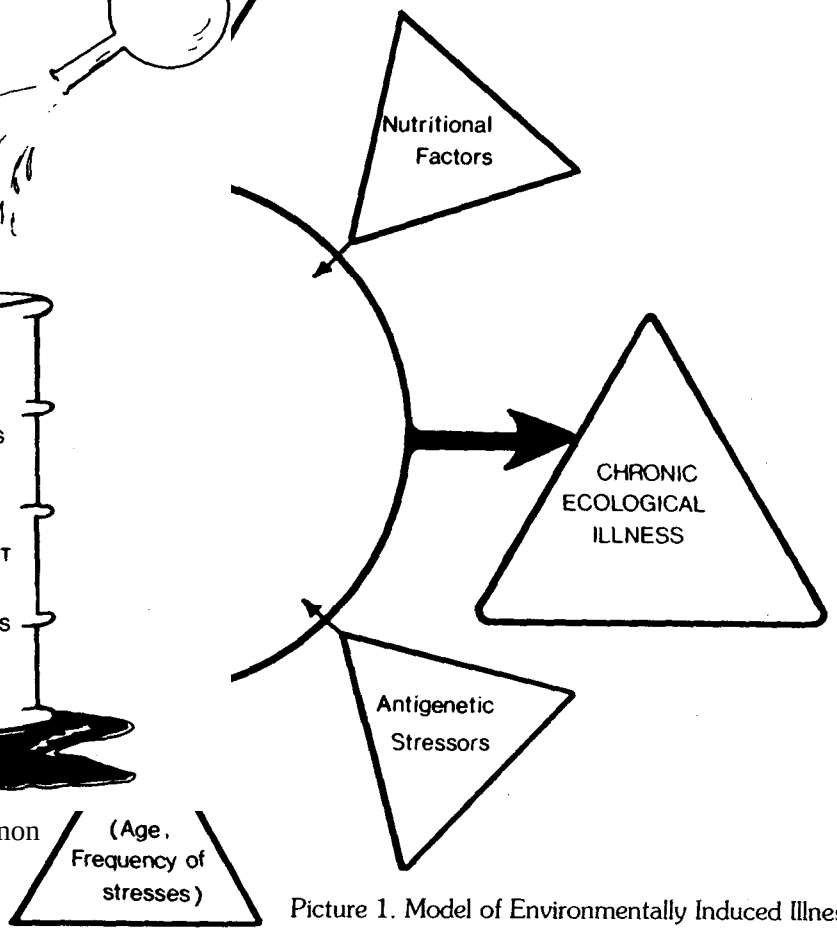
Rapid changes in our environment bring with them many problems. (19) Acid rain is a current topic of concern. Changes in the food manufacturing practice; a social orientation toward fast foods; industrialized farming with the use of petrochemical-ly derived pesticides, herbicides, fertilizers; all of this leaves its mark on people. To that add the over-use of antibiotics, tranquillizers and hormones used during the growth of livestock. (5) Indoor air pollution is another area of concern. Constant out-gassing from synthetic carpets and under-mats; the use of natural gas or kerosene heaters; formaldehyde outgassing from insulation as well as from modern furniture cause great difficulty for some. Excessive use of pesticides in schools, apartments, restaurants, food stores, is a real but neglected problem. Tobacco smoke and the over-use of perfume cause many health problems. The modern building structures themselves are often poorly ventilated, creating so called 'sick building syndrome.' These are all new problems arising from our modern industrialized societies. Because of the modern ills, there is an overuse of legally prescribed tranquillizers, antibiotics, pain killers, and antihistamines which creates more sickness and addiction. Other factors such as naturally occurring antigenic stimuli from tree pollens, grasses, weeds, animal dander, housedust, moulds, fungi, also play an important role. One should not forget psychological stress, quite common in a modern society, although overestimated and very often used as a scapegoat in the explanation of many disorders in which the cause can not easily be defined. Nevertheless, there is a quite well established relationship between the central nervous system (CNS), endocrinological and the immune system, known in general as psychoneuroimmunology, which operates together to maintain the function in health and disease. (1,2,22)

Principles of Clinical Ecology

All of the above mentioned factors have an influence on an individual and his/her adaptive ability. It is believed that all of these factors play a pivotal role in the majority of so called idiopathic disorders or those psychosomatic in nature. One may postulate a model of environmentally induced illness (See Picture 1.) Considering that environmental stressors are contributing to a total stress load which the individual has to deal with, one may imagine that when the load exceeds the threshold limit with the body, then chronic diseases,



Picture 2. Overload Phenomenon



Picture 1. Model of Environmentally Induced Illness

and their symptoms will begin.

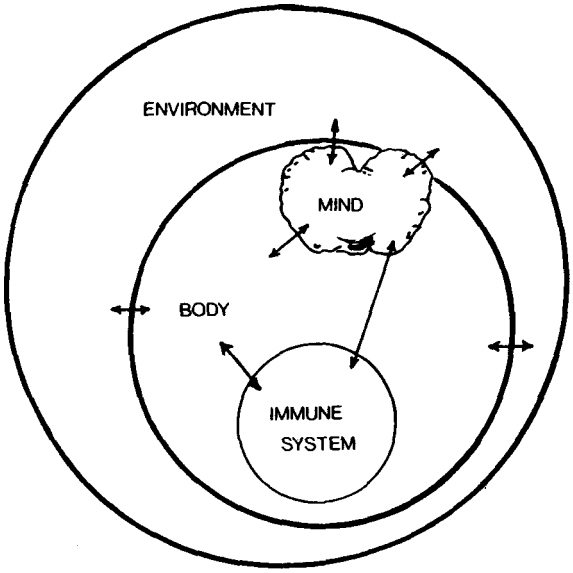
In considering the human adaptive ability to maintain homeostasis, think of a container like a barrel. In the same way that a barrel can only be filled to its capacity, so too a person can only cope with stressors to a certain level of his/her adaptive capacity. One extra drop will cause a spilling effect which in clinical terms means the beginning of the disease process, process of maladaptation and illness (See Picture 2.). This illustrates the overload phenomenon which represents a full barrel with the spilling phenomenon which from an ecological point of view means illness in a person whose adaptive abilities have failed to maintain homeostasis in response to stress.

Clinical Ecology comes to the rescue of those many patients suffering from a multiplicity of symptoms which modern medicine, after excluding the possibility of organic disorders, cannot help. Physicians practicing Clinical Ecology believe that the majority of so called idiopathic diseases are

due to environmental factors working on the particular individual carrying specific genetic susceptibility. (14) The patient's problem is then solved as directly as possible without the use of symptom-relieving drugs.

Diagnostic Methods

The most important factor in the ecological investigation is a detailed, environmentally oriented medical history. (15) One must appreciate and acknowledge the interaction of the total body; particularly the endocrinological, central nervous system and the immune system, with the total environment in which the patient lives (2) (See Picture3). Considering this relationship, one may expect many physiological or patho-physiological changes in any of these above mentioned systems during stimulation or disease process; these can



Picture 3. The Interaction Between the Whole Body, Brain, Immune System and Environment

be discovered during ecological testing and measured by laboratory methods. (22)

Diagnostic methods such as serial dilution titration, intradermal as well as sublingual challenge tests are considered by some doctors, mainly allergists, to have no scientific basis. (6) Whatever the controversy, these methods are working in the well trained hands of Clinical Ecologists. (12,13,20,23,11) Simple elimination of suspected environmental offenders causes the rapid disappearance of signs and symptoms in affected patients. Some particularly sick patients are admitted into environmentally controlled units in the U.S.A. (16,17) Their symptoms are cleared by fasting. The patient is then re-challenged with offending foods, inhalants or chemicals. These above substances produce the same symptoms and signs in the patient as he experienced before coming to the unit. This further proves the Clinical Ecology concept: environmental factors are the cause of some illnesses in susceptible people. Besides the above mentioned methods of testing, a patient with environmentally induced illness shows alteration in his blood in ESR, total complement, C3, C4, eosinophil count, all classes of the immunoglobulins, T cells, T suppressor and helper cell ratio and B cells. The changes in these parameters are observed in patients tested with different antigens in the environmental units. During testing the patient also shows changes in his histamine, serotonin and prostaglandins EFP2 levels. (9,4)

Ecological Management

Once the diagnosis is made (environmental offenders detected), the patient is educated using the basic principles of Clinical Ecology for his management. He is instructed in regards to eliminating the offending foods from his diet and is introduced to the four day elimination and rotation diet. This diet is set up according to biological food families with careful consideration in order to prevent nutritional deficiencies. He is also encouraged to purchase less contaminated organic food whenever possible. In case there is the presence of nutritional deficiencies, supplementation of vitamins and minerals which are tolerated by the patient are used. In the case of major sensitivities to most foods, some patients receive desensitization therapy in the form of sublingual or intradermal serums (23,12,13). They may also be treated sublingually with phenolic food compounds according to Gardner and McGovern (8,10). Inhalant allergy is treated intradermally or sublingually. The patient is instructed about keeping his home environment ecologically safe from moulds and housedust, etc.

He also receives instruction on how to avoid or minimize the pollens in season. In the case of chemical sensitivity which appears to be the most complicated and growing problem, the patient is instructed on how to detect these offenders in his environment. He is able to be aware of these existing offenders and of the various symptoms or reactions arising from these exposures. He is educated concerning the importance of cleaning the home, ridding it of the most commonly offending substances, (natural gas, carpets, cleaning solutions, paints, perfumes, tobacco, etc.)

The patient is also advised on how to avoid particular offenders in the workplace. This is a difficult task at times due to the lack of understanding from management. Where chemical avoidance is impossible, especially to petro-chemically derived hydrocarbons, the patient is desensitized sublingually with S.E.A. (synthetic ethyl alcohol). In order to recover more quickly, the patient is also encouraged to exercise on a daily basis, he is taught how to relax and meditate. Self-hypnosis, positive behavior modification and other therapies may be applied in order to help the patient overcome stressful situations. (22). These therapies are used as an adjunct to the ecological therapy and management.

Role of the Patient

As can be seen from the above-mentioned therapy, Clinical Ecology is truly preventative medicine. This medicine places the responsibility for the health of the patient in the hands of the patient where it belongs. The patient takes care of himself, follows the rules of nature with the help of a physician who only indicates the causes of the patient's difficulties. This is in contrast to those who must rely totally on doctors to remove their symptoms and make them healthier by using drugs. In the true sense, a society that practices preventative medicine is health oriented, not disease oriented, as it is today. One should keep in mind that it is better to prevent than to treat. Once one member of the family (child, husband, wife) follows the ecologically oriented principles and methods of treatment, the entire family improves their health due to the environmental and dietary changes that have been implemented at home.

Prevention and Cost Effectiveness

Technologically and allopathically oriented medical health system is a bottomless pit. Technology, diagnosing the countless increasing new diseases, is going to swallow up all money spent on "health care." In our present hard economic times, this only puts a further burden on society. Of paramount importance, Clinical Ecology is extremely cost effective. One should not blame the medical society for rejecting this new concept of healing in medicine; new concepts are not always easily accepted; however, medicine alone will not solve the problem as long as societies and their politicians allow further pollution of our environment and do not support the preventative concept in health care. We have two choices; either we stop polluting on every level of our ecosystem and find methods to clean it up, even though at first it may not be as economically feasible and attractive, or, the total cost for medical care will consume the entire budget of the future and the problems of health care of the nation will remain unsolved.

The best example of how Clinical Ecology management can be cost effective is a five year follow-up study on two groups of patients suffering from recurrent pulmonary embolism performed in an environmentally controlled unit in Dallas. (18) One group had a regular, generally accepted method of therapy; the second had ecological treatment. The final cost estimates in the two groups may look unbelievable but they really reflect the meaning of preventative medicine. Each group consisted of 10 patients. Only two patients had recurrent phlebitis/emboli in the ecological group in contrast to 60 recurrences in the group treated with anticoagulants. There were no admissions to hospital in the ecological group in comparison to 40 admissions with the other group. The difference in total cost of

hospitalization was 0 dollars in the ecological group compared to 100,000 dollars in the conventionally treated group. There are more reports on cost effectiveness of ecological therapy but they are unpublished.

Let me present one case of environmental sickness diagnosed and treated in an ecological office. E. L. age 36 became sick in 1978. Her major symptoms were as follows: recurrent blindness in right eye, severe premenstrual tension syndrome (PMS), numbness, paresthesia, weakness of the legs from the waist down. The patient was admitted into a reputable teaching hospital for twelve days. The admitting diagnosis was multiple sclerosis (MS).

During the stay in hospital, the patient had the following consults: 3 eye specialists, 3 neurological consults, 1 gynecological consult, 1 gastroentorologist, a right ovarian cyst removed with an anesthesiologist consult, daily visits from her general practitioner.

During the stay in hospital, the tests performed included: 12 visual field assessments, 6 oculovisual assessments, 2 abdominal ultrasounds, 2 ECG's, 1 CAT scan, 1 angiogram, 1 skull x-ray, 1 spinal x-ray, 1 EEG, 1 fluorescent angiography, 1 GI series, 1 cervical spine x-ray, 1 colour vision assessment, 1 lumbar puncture and analysis of central nervous system fluid, 3 SM20 blood analysis.

The cost of hospitalization and tests was $5,856. The cost of consultations was $1,489. The total cost was $7,345. The diagnosis was not established. The patient was told that "a definite diagnosis could only be established at an autopsy." The patient was neither better nor satisfied and continued to look for further solutions.

During the next few years the patient undertook the following: a few different general practitioners totalling 28 visits, had a total dental filling replacement, cytotoxic testing for food allergies, had 80 chiropractic adjustments, saw 1 naturopath, had a hair analysis.

She spent a considerable amount of money for different vitamins. The total amount of the above mentioned treatments was $6,315.40. The total amount of money spent during six years of the patient's searching was $13,660.40.

During the first visit in my office in September 1984, it was discovered that she was exposed to perchlormethane from a dry cleaning factory for a period of three quarters of a year. She was exposed to diazinon at work on a part time basis for six years, and was daily spraying rattan furniture with pesticide in the back of her furniture store.

The total cost of the ecological investigation which included an ecological work-up, OHIP visit, lab tests for blood pesticide level analysis, desensitization serum, intravenous injections for Vitamin C, yeast-free vitamin purchases was $1,787. The cost does not include free fatty acid therapy, or nystatin powder therapy.

The patient was totally free of symptoms after five months of therapy, which included avoidance of chemicals, yeast free products, and eating her organic foods on a four day rotation basis. She enjoys a normal life with no fear of an "autopsy".

Another case of environmental illness diagnosed in a clinical ecologists office was that of W. A., a 32 year old female from the Annapolis Valley in Nova Scotia. She developed chronic chest pain with exacerbation and difficulty breathing, GI problems and severe weight loss. All of these symptoms occurred after an acute 'chest cold' in March 1981. She was hospitalized for a period of three weeks.

During her stay in the hospital, and on out-patient visits between March, 1981 and January, 1982, she saw the following specialists: 3 cardiologists, 2 internists, 6 respirologists, 1 rheumatologist, 1 infectious disease specialist, 1 ENT specialist,
1 general assessment, 4 re-assessments,
2 psychiatrists.

The total fee for consultations was $1,250.40.

During her hospitalization and subsequent out-patient visits the following tests were performed: 6 pulmonary function tests, 1 colonoscopy, 2 EKG'S, 1 barium enema, 1 stress EKG, 1 upper GI series, 1 echocardiogram, 1 gall bladder series, 1

EMG, 1 chest x-ray, 1 bone marrow, 1 spinal x-ray, 2 total bone scans, 1 IVP, 1 lung scan, 1 LE test, 1 thyroid scan, 1 pap smear, 1 bronchoscopy, 1 urinalysis, 6 SM20, 3 stools for O & P.

The cost of one day's hospitalization, which included lab tests, was approximately $400 a day, which totalled $8,400. The total cost for lab tests and doctors' visits during a one year period was $9,650. This cost does not include trips to see the specialists in Halifax and Montreal.

Her first visit to my office took place in January 1982. During the taking of a careful ecological history it was discovered that she lived for several years in a valley which was being regularly sprayed with herbicides and pesticides. From January 1982 to January 1985 she flew to Toronto three times to see me for three consecutive days where examination, ecological testing and counselling were performed. The total cost including OHIP visits, ecological testing, purchase of hypo-allergenic vitamins, laboratory tests, and serum for desensitiza-tion was $ 3,470. The average cost for therapy over a one year period was $1,150.

After removing the patient from the toxic environment, strictly following the four day rotation and elimination diet, creating an environmentally safe place of living, the patient returned to full employment in the beginning of 1984.

There are countless examples of this kind of patient in any ecological practice. Opponents to Clinical Ecology are claiming that we are mainly interested in making money in our practices, and are using diagnostic methods which are not scientifically proven.

It may seem quite expensive initially to many patients when extensive investigations are performed, therapy is started and the necessary alterations to the home environment are done. Nevertheless, the final result of recovery of health, return to productive work, and discontinuation of fruitless doctors' visits make the total venture absolutely cost effective for the patient, his family and the whole of society.

There should be several areas in which changes can be instituted to prevent many diseases in today's society:

Home: the individual patient ecological management

- creating a safe and clean home environment
- changing life style for the entire family (diet, non-smoking, exercise etc.)

Workplace: eliminating the "sick building syndrome"

- use of safe materials for interior furnishings
- better system of ventilation
- banning the use of tobacco
- re-evaluating threshold values for different jobs

School:

- cease indoor painting of schools during the academic year
- cease indoor pesticide and outdoor herbicide spraying
- use of safe teaching materials in classrooms (particularly vocational classes)
- creating an environmentally safe classroom for children with environmental illness
- use of safe cleaning products in school maintenance
- use of safe heating systems and water supply
- beginning early nutritional and pollution awareness education

General:

- recognize the existence of environmentally sensitive patients
- decrease the amount of pesticides used inside buildings
- decrease the use of herbicides in parks, golf courses, and orchards
- stop the pollution of our air, water and food supply
- promote organic means of pest control and promote research into alternatives to chemical use
- encourage co-operation with the Canadian Organic Growers Association to institute safe agricultural methods
- establish funds for research into

environmental sensitivity

- create an Environmental Control Unit (ECU) for severely sick patients
- create environmentally safe half-way houses for those discharged from an ECU or are recovering from chemical exposures.
- add Clinical Ecology and Environmental Medicine to the curriculum of medical schools. This is the most important step that should be taken in order for preventative medicine to take place. With Clinical Ecology I believe it can and will take place.

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